Virginia's New River Valley is a Leader in Unmanned Systems

Virginia is home to a thriving Unmanned Aircraft Systems (UAS) sector with top-tier research institutions, aerospace and UAS assets, and a ready, skilled workforce. The New River Valley region has become a hub for UAS activity in the Commonwealth and is home to one of the seven Federal Aviation Administration (FAA) designated UAS Test Sites with three test facilities. Through strong university and industry partnerships, Virginia has become a national leader in supporting UAS collaboration and creating an environment for continued growth.

Business Advantages:

Workforce:

- New River Community College offers an <u>Engineering Design Technology</u> program that has been recognized by the American Drafting and Design Association (ADDA) as one of the top programs in the country. The program has an Architectural and Engineering Design Specialization in which second-year students produce advanced-concept UAV designs.
- <u>Virginia Tech</u>, one of the top engineering schools in the U.S., produces skilled graduates ready to enter the workforce at a high level. Virginia Tech's extensive UAS research spans guidance and control; sensing and navigation; mobility and actuation; modeling, analysis, and design; safety and cybersecurity; power electronics; wireless communication; human/computer interaction; discovery analytics; sociotechnical systems; and transportation.

R&D Facilities:

- As an FAA-designated UAS test site, the <u>Mid-Atlantic Aviation Partnership</u> (<u>MAAP</u>) combines operational capability, aviation expertise, a strong relationship with the regulator, and the resources of a top research university to effectively tackle foundational challenges in UAS integration in the U.S. The landmark waivers and permissions enabled by MAAP's work have created new business opportunities for their partners and expanded the potential of the industry.
- The tallest netted flight facility in the U.S. with the largest free-span flight area, Virginia Tech's <u>Drone Park</u> provides students, researchers, and companies a place to explore novel technologies and test experimental aircraft in a lower-regulation environment.
- An 1800-acre research farm just a few miles from Virginia Tech's main campus, <u>Kentland Farms</u> offers a rural flight test environment with a 300-foot paved runway and laboratory facilities.
- The <u>Virginia Smart Roads</u> at the Virginia Tech Transportation Institute (VTTI) feature weather-making capabilities, one of the tallest bridges in Virginia, and about 400 acres of aerial space for UAV testing in a rural environment.

Company Highlights:

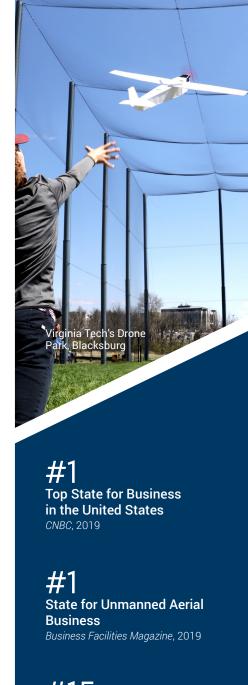
- <u>VPT, Inc.</u> is a global leader in providing power conversion solutions for use in avionics, military, space, and industrial applications. VPT's award-winning products and services power systems for world-class organizations and programs such as Airbus aircraft and the Predator UAV.
- Wing, a subsidiary of Alphabet (Google), launched America's first commercial drone delivery service to homes in Southwest Virginia. Wing was the first drone delivery company to receive Air Carrier Certification from the FAA through the federal Integration Pilot Program (IPP). The company chose Christiansburg, Virginia due to its hospitable climate for emerging technologies and their existing relationship with Virginia Tech and MAAP.
- <u>Aeroprobe Corporation</u> produces instruments that measure real-time air and flow data for applications in the aerospace, automotive, turbomachinery, wind turbine, and wind tunnel testing industries around the world.

Learn more at <u>vedp.org/Industry/Unmanned-Systems</u>.









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